trast negligibly so. In these experiments they show that the constant presence in the general, as distinct from the specifically portal, circulation of a small amount of free hemoglobin, leads eventually to a siderosis of the liver similar to that which has been considered so significant in pernicious anemia. When this amount is kept within certain limits, renal siderosis fails to appear or is negligible in degree. When more is given the epithelium of the renal tubules rapidly becomes pigmented, the iron deposition far outstripping that in the liver. Their conception of the phenomenon is that the liver is able to remove free hemoglobin from the blood stream, and normally is probably the organ which keeps the plasma free of hemoglobin. When the hemoglobin coming to it is increased, it may still receive it but in so doing become siderosed. When hemolysis is considerable the liver is overtaxed and the pigment accumulates in the blood and is dealt with by the kidneys according to its threshold of excretion. The hemosiderin passes readily through the glomeruli but undergoes a greater or less resorption during its passage through the tubules and renal siderosis comes about. They believe that the variations in distribution of hemosiderin in pernicious anemia are rendered understandable by these facts.

Tularemia Francis 1921. A New Disease of Man.—Francis' (*Jour. Am. Med. Assn.*, 1922, 78, 1015) report has to do with one of a series of most important observations which have been carried on by McCoy and his associated of the United States Public Health Service, the impetus for which was received during the fight against plague in California in 1911. At that time McCoy recognized a plague-like disease of rodents, which was differentiated from true plague, and of which tularense was later found to be the etiological agent. This plague-like disease has been found in squirrels, rabbits and guinea-pigs, being transmitted by various insects. Of importance to the profession is the discovery that this disease occurs in man from sources of infection in California, Indiana and Utah and that it is readily contracted by laboratory workers intimately associated with experimental work upon this infection. When the disease is contracted by insect bite it is characterized by a well-marked reaction at the site of infection, which is followed after a brief incubation by lymphadenitis of the regional glands, chills and fever and prostration for a period of from one to four weeks. Laboratory workers contracted the disease without obvious sites of infection; they all showed a sudden onset of fever, without other definite manifestations, which lasted with remissions about three weeks. All of the trained workers of the service who were immediately concerned with the investigation had the infection and showed characteristic immunological reactions. Francis points out that "the ready susceptibility of man to this infection in Nature and in the laboratory, its wide prevalence in Nature in a number of rodents, and the growing number of blood-sucking insects found capable of conveying the infection, should combine to put the medical profession of the United States on the watch for cases of this new disease of man."

Length of Life of Transfused Erythrocytes.—Wearn and his co-workers (*Arch. Int. Med.*, 1922, 29, 527), using the technic devised by Ashby determined the duration of the existence of Group IV trans-

fused red blood corpuscles in the circulation of patients whose blood belonged to Group II. Four cases of pernicious anemia and four of anemia secondary to nephritis were studied. The last of the transfused red blood cells disappeared from the circulation in from fifty-nine to one hundred and thirteen days, with an average of eighty-three days. No difference was noted between the duration of the stay of the transfused cells in the circulation of patient with primary and secondary anemia. One of the cases of pernicious anemia (Group II) was transfused with blood from another case of pernicious anemia (Group IV) and in this instance the transfused cells behaved as did the corpuscles from normal donors.

SURGERY

UNDER THE CHARGE OF

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A Consideration of the Relative Merits of Resection and Gastro-enterostomy in the Treatment of Gastric and Duodenal Ulcer.—De Quervain (*Surg. Gynec. and Obstet.*, 1922, **34**, 1) says that he has abandoned schematic gastro-enterostomy and leans more toward resection. Ninety per cent of ulcer recurrences, peptic ulcer and other disturbances, occur in the first four years after operation, so that statistics which depend on results reported earlier are apt to show too favorable results. Simple gastro-enterostomy produces in all forms of gastric ulcer about the same early results—somewhat more than four-fifths cure or improvement approximating cure. In ulcers at a distance from the pylorus the average results are no less favorable than in those at the pylorus. With sleeve resection, there is no late bleeding from the ulcer with the resultant occasional death and the danger from peptic ulcer is almost *nil*.

Benign Tumors of the Stomach.—Eusterman and Senty (*Surg. Gynec. and Obstet.*, 1922, **35**, 5) say that benign tumors of the stomach are rare and constitute only 1.3 per cent of all gastric tumors that have come to operation. The actual proportion of benign new growths to malignant new growths or ulcerations is as 1 to 200. Myomata and fibromata constitute the largest group, gastric polyposis the most infrequent. About 50 per cent of benign tumors are found in patients more than forty years old. There is no characteristic syndrome and gastric chemistry ranges from achylia to hyperacidity with hypersecretion. The summation of evidence favors the diagnosis of gastric cancer. The majority of tumors are situated in the region of the pylorus, the greater curvature, anterior and posterior walls. The smaller tumors are

practically symptomless unless situated at the orifices or unless multiple. Common complications are recurring hemorrhage and pyloric obstruction. Palpable mass and food retention are less frequent than in gastric cancer.

Essential Hematuria.—Levy (*Surg. Gynec. and Obstet.*, 1922, **34**, 22) says that the diagnosis of essential hematuria should be made only when all known urological methods have been employed with negative findings for it is purely a clinical diagnosis indicating renal bleeding of unknown etiology. In 36 per cent of the cases, the onset of the hematuria occurred in the fourth decade of life. The bleeding developed spontaneously in most cases and was symptomless. The right kidney was responsible for the bleeding in 17 cases and the left in 13. In no case were both kidneys involved. The results of operative procedures have not been better than those of non-operative methods. In the author's series, there were recurrences after decapsulation and two nephrotomies. Nephrectomy is the only operation ever indicated and that only as an emergency measure to save a patient from bleeding to death. Non-operative methods have been used with success, including intrapelvic injection of silver nitrate and adrenalin, the oral administration of calcium lactate and the subcutaneous or intramuscular injection of horse serum. Spontaneous cessation of the bleeding occurs frequently in essential hematuria.

Results in One Hundred Cases of Cancer of Prostate and Seminal Vesicles, Treated with Radium.—Deming (*Surg. Gynec. and Obstet.*, 1922, **34**, 99) says that a combination of radium and surgery offers a possibility for treatment of cancer of the prostate and seminal vesicles. While operation does not diminish the amount of radium necessary to produce good results it does not increase the possibility of hastening metastases. Radium gave symptomatic relief and return of normal urination in 75 per cent of the cases. Moreover, radium relieved the pain in the back in 50 per cent of cases suffering from metastases. Irritation from radium can be avoided by treating widely remote areas in successive treatments and by alternating between rectal, urethral and vesical applications. At least 3000 milligram hours must be given to produce symptomatic and local results in the same patient. Cases which did not respond to radium did not receive sufficient radiation. Large doses must be given in as short a period as possible to produce maximum results. Combined extraglandular and intraglandular radiations apparently give the most satisfactory results.

Synovial Membrane Tumors of Joints.—Hartman (*Surg. Gynec. and Obstet.*, 1922, **34**, 161) says that the occurrence of this type of tumor in joints and especially in the knee-joint raises at once the problem of saving the limb and the function of the joint. Their development is slow as a rule and ample warning is always given in the form of pain, swelling and interference with function. They are readily removed if attacked in the early pedunculated stage without danger of local recurrence or remote metastases. For classification, it seems best to place them with the benign tumors of connective tissue origin since the giant cells are of the foreign body type and no mitosis is seen. There is however a

potential malignancy. Palliative measures and incomplete excision are contraindicated and are perhaps responsible for the malignant characteristics developed in these cases. These neoplasms should not be termed sarcoma at least until evidences of malignancy are seen either clinically or pathologically. Since any one of the characteristic cells, namely xanthoma or foam cells, pigmented cells and giant cells, may be absent from an otherwise typical case the writer prefers the name of myeloid tumor.

Carcinoma of Prostate.—BARRINGER (*Surg. Gynec. and Obstet.*, 1922, 34, 175) says that in but 2 per cent of cases of carcinoma of the prostate seen at the Memorial Hospital, is the carcinoma confined to the prostate. Routine prostatic examination of all patients beyond the age of fifty, irrespective of symptoms is the only rational method whereby we may hope to make a diagnosis of prostatic carcinoma early in the disease, The results of radium treatment of carcinoma of the prostate are superior to operative removal both in causing regression of the disease and in coping with urinary retention.

Thyrotoxicosis.—BLACKFORD (*Surg. Gynec. and Obstet.*, 1922, 34, 185) says that there are two points to be emphasized, importance of early diagnosis in order to obtain a cure by surgical removal of a toxic goiter before permanent damage is done the patient. The mortality from removal of non-toxic or mildly toxic cases is almost zero in competent hands. Second, a badly damaged heart from goiter intoxication does not contraindicate surgery. Practically speaking, the cardiac reserve of the patient can be improved by treatment until good enough to withstand operation. The bulk of surgical mortality occurs in badly toxic cases, not in the extreme cardiopaths.

Histology and Mortality in Cases of Tumor of the Bladder.—SCHOLL (*Surg. Gynec. and Obstet.*, 1922, 34, 189) says that 41 per cent of all patients operated on for malignant papillomata are alive on an average of three years after operation while only 11 per cent of patients with solid carcinoma have lived more than three years after operation. The incidence of recurrence following operation on patients for solid carcinoma is much greater than that for malignant papillomata. Squamous-cell carcinomata of the bladder are extremely malignant and rapidly fatal while adenocarcinomata are about as severely malignant as papillomata. Simple angiomata of the bladder may grow so large as to cause obstruction. Myomata of bladder often grow very large. Myxomata occur generally in young persons. Sarcoma is probably the rarest and most malignant of vesical tumors. It occurs in middle-aged persons, metastasizing extensively with tendency to rapid recurrence.

Duodenal Ulcer in Infancy.—PATERSON (*Lancet*, January 14, 1922, p. 63) says that duodenal ulcer is a rare condition in infants but more careful examination of the duodenum in marasmic infants may show it to be more common than is at present admitted. Ulcers may be present in melena neonatorum. In older infants, they may follow on any gastro-intestinal upset. They may certainly complicate extensive septic burns or septicemia. Tuberculosis is the common cause of